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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/541,393	03/31/2000	Roy T. Hashimoto	ERT-008	3987

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EXAMINER

PHILIPPE, GIMS S

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/541,393

Applicant(s)

HASHIMOTO, ROY T.

Examiner

Gims S Philippe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-24 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7 and 26-28 is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. Applicant's amendment received on September 22, 2003 in which claims 20, 25, and 29-32 were canceled and claims 1, 7-15, 22, 24, 26 and 27 were amended has been fully considered and entered, but the arguments are moot in view of the new ground(s) of rejection.

Pending claims:

Claims 1-19, 21-24, and 26-28.

Note: The new ground of rejection is rendered necessary in view of a new interpretation of Miller (US 6,118,595).

The applicant is also urged to review the application in order to eliminate any Internet links and also to correct typographical errors.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1-6, 8-19, and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCutchen (US Patent no. 6,141,034) in view of Miller (US Patent no. 6,118,595).

As per claims 1-3, 6, and 24, McCutchen discloses an outward facing camera system comprising a plurality of equatorial cameras distributed evenly about an origin in a plane (See McCutchen fig. 55, and col. 55, lines 12-30).

It is noted that although McCutchen discloses a plurality of camera located at the poles (See fig. 56 and col. 55, lines 53-67), it is silent about the use of polar camera with a vertical field of view overlapping a vertical field of view of an equatorial camera.

However, Miller discloses using polar cameras with a vertical field of view overlapping a vertical field of view of an equatorial camera (See Miller fig. 1, camera 10, and col. 3, lines 66-67, col. 4, lines 1-48, lines 65-67, and col. 5, lines 1-11, and col. 7, lines 2-18).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying McCutchen multiple cameras by incorporating Miller's polar cameras in the outward facing camera system. The motivation for performing such modification in McCutchen is to provide without repetition all four-pi radian, which gives a spherical view, or the object as taught by Miller (See Miller col. 2, lines 25-56).

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As per claims 4, most of the limitations of this claim have been noted in the above rejection of claim 1. In addition, McCutchen further discloses a first camera is offset approximately 90 degrees from a second equatorial camera (See McCutchen fig. 54, and col. 54, lines 64-67 and col. 55, line 1).

As per claims 5 and 21, most of the limitations of this claim have been noted in the above rejection of claim 1. In addition, McCutchen further discloses each equatorial camera being offset from an adjacent equatorial camera by the same equatorial adjacent angle (See McCutchen col. 56, lines 17-48).

As per claims 16-18, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, McCutchen further teach tilted equatorial cameras perpendicular and below the plane (See McCutchen col. 55, lines 39-47).

As per claim 19, McCutchen further discloses the cameras as being video cameras (See McCutchen's Abstract).

As per claims 8, 10, 11-15, and 22-23, most of the limitations of these claims have been noted in the above rejection of claim 1.

It is noted that McCutchen is silent about providing four cameras about an origin in a plane and three polar cameras coupled to the equatorial cameras and tilted above the plane as claimed.

However, Miller suggests a camera arrangement with polar and equatorial cameras wherein the polar and equatorial cameras are facing each other (See Miller col. 4, lines 36-48 and col. 5, lines 1-48).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying McCutchens plurality of equatorial by incorporating Miller's polar and equatorial cameras wherein the polar and equatorial cameras are facing each other. The motivation for performing such a modification in McCutchens is to photograph the full spherical view as taught by Miller (See Miller col. 4, lines 32-35).

4. Claims 7, 26-28 and are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S Philippe whose telephone number is (703) 305-1107. The examiner can normally be reached on M-F (9:30-7:00) Second Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S Kelley can be reached on (703) 305-4780. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.



Gims S Philippe
Primary Examiner
Art Unit 2613

GSP

December 11, 2003